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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,259	09/21/2005	Masahiro Hagiwara	Q90407	1176
23373	7590	10/18/2010	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			NAKARANI, DHIRAJLAL S	
			ART UNIT	PAPER NUMBER
			1787	
			NOTIFICATION DATE	DELIVERY MODE
			10/18/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
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Office Action Summary

Application No.

10/550,259

Applicant(s)

HAGIWARA ET AL.

Examiner

D. S. Nakarani

Art Unit

1787

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/226)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 22, 2010 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-5 and 9-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fail to provide support for limitation "the content of the dispersion stabilizer is from 6 to 20.7% by weight" in claim 1, line 14 and in claim 14, line 8. The Examples 1a, 1b, 1c, 2, 3, 4, 10, 11 and 12 provides support for "the content of the dispersion stabilizer is from 2.7 to 6 parts by weight per 10 parts by weight of tin-doped indium oxide fine particles" (i.e. from 27 to 60 weight parts per 100 weight parts of tin-doped indium oxide fine particles).

The Example 1b provides support "the content of the dispersion stabilizer is 20.7% by weight and the concentration of the tin-doped indium oxide fine particle is 34.5% by weight" (i.e. 6 weight parts of dispersion stabilizer per 10 weight parts of tin-doped indium oxide fine particles). There is no support for the limitation "the content of the dispersion stabilizer is from 6 to 20.7% by weight, and the concentration of the tin-doped indium oxide fine particles is more than 34.5% by weight". When calculated, Example 2, shows 2.7 weight parts of dispersion stabilizer per 10 weight parts of tin-doped indium oxide, Example 3, shows 3.0 weight parts of dispersion stabilizer per 10 weight parts of tin-doped indium oxide, Example 4, shows 2.7 weight parts of dispersion stabilizer per 10 weight parts of tin-doped indium oxide and Examples 1a, 1c, 10, 11 and 12 show 6 weight parts of dispersion stabilizer per 10 weight parts of tin-doped indium oxide. Thus afore said limitation constitute new matter. Furthermore, when calculated, the Examples 1a, 1b, 1c, 2, 3, 4, 10, 11 and 12, provides support for the dispersion stabilizer comprising: 100 weight parts phosphate ester-based compound, 40 to 200 weight parts of an organic acid (2-ethylhexanoic acid) per 100 weight parts of phosphate ester-based compound and 20 to 300 weight parts of a chelate (acetylacetone) per 100 weight parts of phosphate ester-based compound. The invention as claimed reads on the dispersion of tin-doped indium oxide fine particles containing: (1) 20.7 wt.% dispersion stabilizer and 10 wt.% tin-doped indium oxide fine particles and (2) 6 wt.% dispersion stabilizer and 60 wt.% tin-doped indium oxide fine particles. There is no support for the dispersion of tin-doped indium oxide fine particles containing: (1) 20.7 wt.% dispersion stabilizer and 10 wt.% tin-doped indium oxide fine

particles and (2) 6 wt.% dispersion stabilizer and 60 wt.% tin-doped indium oxide fine particles. Thus limitation "content of the dispersion stabilizer is from 6 to 20.7% by weight" in claim 1, line 14 and in claim 14, line 8, constitute new matter.

4. Claims 1-5 and 9-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (U. S. Patent 6,329,061 B2) in view of Kobata et al (U. S. Patent 6,673,456 B1) and Mont et al (U. S. Patent 4,027,069) for the reasons of record set forth in paragraph 4 of the Office Action mailed April 23, 2010 (Paper Number 20100420).

5. Applicant's arguments filed July 22, 2010 have been fully considered but they are not persuasive. In reference to rejection of claims 1-5 and 9-26 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, applicants essentially argue that the limitation "content of the dispersion stabilizer is from 6 to 20.7 by weight" is supported by Examples 1a, 1b, 1c, 2, 3, 4, 10,11 and 12. Applicants further state that the content of the dispersion stabilizer and the concentration of the tin-doped indium oxide fine particles are independent of each other.

These arguments are unpersuasive because there is nothing in the specification and/or on record showing that the content of the dispersion stabilizer and the concentration of the tin-doped indium oxide fine particles are independent of each other. The specification as filed does not provide support for the dispersion of tin-doped indium oxide fine particles containing: (1) 20.7 wt.% dispersion stabilizer and 10 wt.% tin-doped

indium oxide fine particles and (2) 6 wt.% dispersion stabilizer and 60 wt.% tin-doped indium oxide fine particles. The invention as claimed reads on these dispersions.

In reference to rejection of claims 1-5 and 9-26 under 35 U.S.C. 103(a) as being unpatentable over Kondo (U. S. Patent 6,329,061 B2) in view of Kobata et al (U. S. Patent 6,673,456 B1) and Mont et al (U. S. Patent 4,027,069), applicants mainly points to the concentration of ITO, chelate, carboxylic acid and phosphate ester salt are lower in Kobata et al's Examples than in the claimed invention.

These arguments are unpersuasive because the recited contents of ITO, chelate, carboxylic acid and polyphosphate ester salt in the Reference Table in the arguments filed July 22, 2010 are disclosed by Kobata et al for an interlayer. The interlayer of the present invention also has concentration of ITO is 0.2 wt%, phosphate ester is 0.02 wt% acid is 0.04 wt% and chelate is 0.06 wt% (Interlayer of Example 1a). Thus the interlayer of present invention does not have argued concentration. A person of ordinary skill in the art would have found it obvious to make desired concentrated ITO dispersions as taught by Kondo.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/D. S. Nakarani/
Primary Examiner, Art Unit 1787**

DSN
October 8, 2010.